

WHAT IS CLAIMED IS:

1. A composition for removing a copper-compatible resist, comprising:
about 0.1% to about 10% by weight of an alkylbenzenesulfonic compound;
about 10% to about 99% by weight of a glycolether compound; and
about 0.5% to about 5% by weight of a corrosion inhibitor.
2. The composition according to claim 1, wherein the glycolether compound has a composition ratio within about 85% to about 99% by weight.
3. The composition according to claim 1, wherein the alkylbenzenesulfonic compound includes at least one of benzenesulfonic acid, toluenesulfonic acid, dodecylbenzenesulfonic acid, tetrapropylbenzenesulfonic acid and phenolsulfonic acid.
4. The composition according to claim 1, wherein the glycolether compound includes at least one of ethyleneglycolmethylether, ethyleneglycolethylether, ethyleneglycolbutylether, diethyleneglycolmethylether, diethyleneglycolethylether, and diethyleneglycolpropylether.
5. The composition according to claim 1, wherein the corrosion inhibitor includes one of triazole compound and one of antioxidant.
6. The composition according to claim 1, wherein the corrosion inhibitor includes at least one of mercapto compound.

7. The composition according to claim 1, wherein the corrosion inhibitor includes one of mercapto compound, one of triazole compound and one of antioxidant.

8. The composition according to claim 7, wherein the triazole compound includes tolyltriazole, benzotriazole, aminotriazole, carboxylbenzotriazole, wherein the antioxidant includes succinic acid, benzoic acid, citric acid and catechol, wherein the mercapto compound includes mercaptobenzodiazole, mercaptoethanol, mercaptopropanediol, mercaptosuccinic acid.

9. A fabricating method of an array substrate for a liquid crystal display device, comprising:

forming a gate line and a gate electrode of copper on a substrate through a photolithographic process using a photoresist;

removing the photoresist remaining after forming the gate line and the gate electrode with a composition including about 0.1% to about 10% by weight of an alkylbenzenesulfonic compound, about 10% to about 99% by weight of a glycolether compound, and about 0.5% to about 5% by weight of a corrosion inhibitor;

forming a first insulating layer on the gate line and the gate electrode;

forming a semiconductor layer on the first insulating layer over the gate electrode;

forming source and drain electrodes on the semiconductor layer, and a data line connected to the drain electrode;

forming a second insulating layer on the source and drain electrodes and the data line;
and

forming a pixel electrode on the second insulating layer.

10. The method according to claim 9, wherein the glycolether compound has a composition ratio within about 85% to about 99% by weight.
11. The method according to claim 9, wherein the source and drain electrodes and the data line are formed of the same material as the gate line and the gate electrode by using the composition.
12. The method according to claim 9, wherein the alkylbenzenesulfonic compound includes at least one of benzenesulfonic acid, toluenesulfonic acid, dodecylbenzenesulfonic acid, tetrapropylbenzenesulfonic acid and phenolsulfonic acid.
13. The method according to claim 9, wherein the glycolether compound includes at least one of ethyleneglycolmethylether, ethyleneglycolethylether, ethyleneglycolbutylether, diethyleneglycolmethylether, diethyleneglycolethylether, and diethyleneglycolpropylether.
14. The method according to claim 9, wherein the corrosion inhibitor includes one of triazole compound and one of antioxidant.
15. The method according to claim 9, wherein the corrosion inhibitor includes at least one of mercapto compound.
16. The method according to claim 9, wherein the corrosion inhibitor includes one of mercapto compound, one of triazole compound and one of antioxidant.

17. The method according to claim 16, wherein the triazole compound includes tolyltriazole, benzotriazole, aminotriazole, carboxylbenzotriazole, wherein the antioxidant includes succinic acid, benzoic acid, citric acid and catechol, wherein the mercapto compound includes mercaptobenzodiazole, mercaptoethanol, mercaptopropanediol, mercaptosuccinic acid.

18. A fabricating method of a copper line for a semiconductor device, comprising:
forming an oxide film on a semiconductor substrate;
forming a barrier metal pattern on the oxide film;
forming a copper pattern on the barrier metal pattern through a photolithographic process using a photoresist; and
removing the photoresist remaining after forming the copper pattern with a composition including about 0.1% to about 10% by weight of an alkylbenzenesulfonic compound, about 10% to about 99% by weight of a glycolether compound, and about 0.5% to about 5% by weight of a corrosion inhibitor.

19. The method according to claim 18, wherein the glycolether compound has a composition ratio within about 85% to about 99% by weight.

20. The method according to claim 18, wherein the alkylbenzenesulfonic compound includes at least one of benzenesulfonic acid, toluenesulfonic acid, dodecylbenzenesulfonic acid, tetrapropylbenzenesulfonic acid and phenolsulfonic acid.

21. The method according to claim 18, wherein the glycolether compound includes at least one of ethyleneglycolmethylether, ethyleneglycolethylether, ethyleneglycolbutylether, diethyleneglycolmethylether, diethyleneglycolethylether, and diethyleneglycolpropylether.

22. The method according to claim 18, wherein the corrosion inhibitor includes one of triazole compound and one of antioxidant.

23. The method according to claim 18, wherein the corrosion inhibitor includes at least one of mercapto compound.

24. The method according to claim 18, wherein the corrosion inhibitor includes one of mercapto compound, one of triazole compound and one of antioxidant.

25. The method according to claim 24, wherein the triazole compound includes tolyltriazole, benzotriazole, aminotriazole, carboxylbenzotriazole, wherein the antioxidant includes succinic acid, benzoic acid, citric acid and catechol, wherein the mercapto compound includes mercaptobenzodiazole, mercaptoethanol, mercaptopropanediol, mercaptosuccinic acid.